ABSTRACT

Described is a closed-loop power detector/controller for wireless systems employing a non-constant amplitude envelope modulation scheme. Any AM component in the feedback signal resulting from non-constant amplitude envelope signals is eliminated via feed-forward cancellation of the envelope signal. Generally, a signal representative of the AM variation in the non-constant amplitude envelope signals prior to amplification is obtained. This AM variation signal is then used to cancel any AM component in the feedback signal resulting from the non-constant envelope to create a power amplifier control signal without any AM variation, only the desired ramp profile.